REGIONAL-STATE SENIOR LEVEL DIALOGUE NEW MEXICO NUTRIENT PROFILE

 Does your State have narrative water quality standards that address implicitly or explicitly the impacts of excess nutrient pollution? What are they and what endpoints do they cover? (citations)

The State of New Mexico narrative criterion to determine nutrient impairment provides,

"Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state." (NMAC 2005)

The following indicators are used for narrative nutrient assessment of either wadeable streams and/or lakes: percent algae coverage; periphyton growth (thickness); secchi depth (m); cyanobacteria (%); presence of anoxic layer; dissolved oxygen (% saturation) and pH; TN and TP concentrations; continuous dissolved oxygen and pH datasets (sonde data); dissolved oxygen and pH grab data; and periphyton chlorophyll a (µg/cm2).

Dissolved oxygen and pH thresholds are based on designated uses of an assessment unit, as indicated in § 20.6.4.900 of the State of New Mexico Standards for Interstate and Intrastate Surface Waters (NMWQCC 2011). Chlorophyll a, TN and TP thresholds are based on New Mexico's nutrient criteria development process as discussed in assessment protocols found at http://www.nmenv.state.nm.us/swqb/documents/swqbdocs/MAS/Protocols/AssessmentProtocol+Appendices-2014.pdf. Additionally, the state is pursuing a nutrient stressor response project, funded through EPA N-STEPS, for development of TN and TP thresholds for wadeable streams.

NOTE: New Mexico has numeric criteria (for TP) applicable to 10 regulatory segments, with includes three lakes.

2. Does your State have assessment methods to identify waters impaired by nutrient pollution using narrative criteria and/or designated uses? Has your State listed waters for nutrients using your narrative standards? Which waterbody types?

The State of New Mexico has adopted narrative assessment methods, currently limited to wadeable streams and lakes, which are used for evaluating status and § 303(d) listings for nutrients (TN and/or TP).

3. Has your State issued TMDLs for nutrient pollution based applicable narratives? If so, what approach was used to set endpoints (e.g., N or P target concentrations) for the TMDL allocations?

The state has developed and EPA has approved a total of 66 nutrient related TMDLs (source EPA ATTAINS at http://ofmpub.epa.gov/waters10/attains state.control?p state=NM) based on nutrient narrative and/or site specific phosphorus water quality standards. The TMDL endpoints vary based on past practices, e.g., algal biomass, aggregated ecoregional TN and TP values, and site specific phosphorus numeric water quality standards. However, the dominant TMDLs

developed to date (~60) are based on nutrient narrative listings which use aggregated ecoregional TN and/or TP endpoints.

4. Does your State use its narrative water quality standards to determine the need for nutrient limits in NPDES permits?

EPA is the permitting authority in New Mexico. Permit limits for nutrients are based on TMDL waste load allocations. To date EPA has issued nine permits from implementing approved TMDLs.

a. If so, how does the state determine what the limits should be? Water quality-based or technology-based? [If technology-based: what basis -- state requirements?]

TMDLs are based on water quality criteria while some WLAs initially were based on current plant conditions or technology with schedules established in the permit for moving towards meeting the TMDLs and WQ criteria.

b. If not, is the state incorporating monitoring requirements for nutrient pollution in permits?

Monitoring requirements are included in permits where a nutrient impairment has been identified but the TMDL is not complete. Three New Mexico permits currently have reporting requirements with reopeners.

- 5. When your State incorporates WQBELs for nutrients into permits, do you use any of the following to provide implementation flexibility?
 - a. Variances? [NOTE: the proposed new WQS regulation provides significant new information to consider regarding how variances can support strong interim progress towards reducing nutrient pollution while maintaining long-term goals for fully achieving WQS.]

The New Mexico Water Quality Act (NMWQA, 1978) has been interpreted by the state (the water quality standards authority) as disallowing variances to water quality standards. There may be an existing provision in the NMWQA that could potentially be interpreted to allow for variances. The state is considering an alternate approach of providing for a long-term remediation/temporary standard provision that could be used to allow interim progress as the current proposed WQS regulation amendments.

b. Compliance schedules?

Compliance schedules for NPDES permits are allowed by § 20.6.4.12, New Mexico Administrative Code, of the state water quality standards consistent with 40 CFR § 122.47. Compliance schedules may be included in NPDES permits at the time of renewal or modification and are written to require compliance at the earliest practicable time. Compliance schedules include milestone dates and provisions for submitting progress reports and a final report detailing activities conducted toward

meeting compliance schedule provisions. Currently, six New Mexico permits include compliance schedules with interim reporting requirements or limits and final numeric limitations. In several instances, interim permit compliance schedule milestones and requirements are developed based on implementation described in the finalized TMDL. The implementation sections of these TMDLs include language that allows for compliance schedules in the permit with the expectation that the criteria will be met at some point in the future.

c. Staged implementation of TMDLs? [NOTE: this concept is about writing a TMDL to a water quality standard -- either numeric or translated from a narrative -- not an interim WQ goal. The TMDL writer then establishes TMDL assumptions and expectations that the load allocations in a TMDL will be implemented over a reasonable period of time. For example, in the Chesapeake Bay TMDL, EPA worked with the Bay States and DC, to establish an expectation that all practices and measures needed to implement the TMDL would be implemented over 15 years.]

New Mexico prefers a phased TMDL approach to reach the targets and is working on a strategy to address permitting nutrient discharges to low/no dilution streams.

6. [If the answer is no: Are you willing to work w/ EPA to explore how these tools might help make stronger near-term progress on reducing nutrient pollution from point sources? What's a reasonable schedule for adopting/using them?]

State response called for.

7. Are there other opportunities for making strong, near-term progress on reducing pollution in your state? How can EPA help you make more progress.

State response called for.